

-STUDY THE EFFECT OF EXTRACT ON SEED GERMINATION AND GROWTH-



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RESULTS:

Note that the concentration {0.1} is the best concentration because the seeds watered with this concentration were The best growing, as the seeds watered with this concentration grew rapidly

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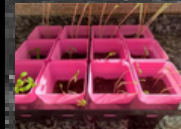
SEARCH METHOD

Using the soil protocol to determine the soil acidity using the acidity syste {the pH scale} and measuring carbonate and using the vegetation of the plant to determine the length and number of pepper plant leaves methods of collecting data: Determine the areas in which the search tools are placed as a quantity of soil from both regions {before watering the soil with dates seeds, and after Water} add water to it and stir it for 30 seconds, then set it aside for 3 minutes {repeat the experiment 5 times



SUMMARY:

Our research aims to study the effect of date kernel extract on seed germination and growth We also want to know the effect of date kernel extract on soil properties Chemical, we also want to know if date kernels can be used as a water filter Gray. After researching the studies, it became clear to us that the kernels of dates contain compounds and chemical elements and from Send the samples to Sultan Qaboos University and show us that the date kernel powder contains Filonian compounds and the elements sodium, potassium and phosphorus important for the plant, and our answer to Thes questions we first broke up the date kernels to turn them into powder in the form of 'powder', then we By convertin the powder into powders of different concentrations by adding it in water in different quantities, which It gave us concentrations {0.1}, 0.01 and 1 plus plain water, and then we brought Different types of seeds and we chose from them {pepper, tomato, okra} and we watered all the seeds with all Concentrations and it became clear to us that pepper was the most growth and life of which means that the extract is a stimulating substance, After that, we started to notice the effect of powders on different seeds, as all the seeds grew in All concentrations were the best as the seeds grew faster and did not die.



RESEARCH QUESTIONS:

- extract have on pepper seed germination?
- How do different concentrations affect the growth of a pepper plant?
- What effect does the extract have on the chemical properties of the soil?
- Can date kernels be used as a greywater filter?

PHOTOS

	0.1	0.01	1	water
First week	1	0.5	0.7	0.8
Second week	2	1	1.4	1.6
Third week	3.4	1.5	2.3	2.4
Fourth week	5	2.5	4	3
Fifth week	6	3	5	3.5
Sixth week	7.5	5	6.5	4
Seventh week	8.5	6.5	5	4.6
Eighth week	10.5	8	9	5.2

	0.1	0.01	1	water
First week	2	2	2	2
Second week	2	2	2	2
Third week	2	2	2	2
Fourth week	3	2	2	2
Fifth week	4	3	3	3
Sixth week	4	4	4	4
Seventh week	5	4	5	4
Eighth week	6	5	5	5

